

CLAIMS

1. Refrigeration system comprising one compressor (10) that via a closed circuit containing a circulating refrigerant is connected to a condenser (14, 14a) and two or more evaporators (21,28) **characterized in** that the circuit comprises a container (19, 19a) or the like communicating with the condenser (14,14a) and having at least a first outlet communicating with at least one evaporator (21) via a first valve (22,22a) or the like, the container (19,19a) being arranged to receive and temporarily store a certain volume of the refrigerant flowing from the condenser, the container (19,19a) also being provided with at least a second outlet (26,26a) communicating with one or several of the additional evaporators (28) to circulate the remaining part of the refrigerant through the at least one of the last mentioned evaporators (28) when said volume has been stored in the container (19,19a), said second outlet (26,26a) being positioned above said first outlet.
- 15 2. Refrigeration system according to claim 1 **characterized in** that a second valve (29,29a) or the like is arranged at the second outlet (26,26a).
3. Refrigeration system according to any of claims 1-2 **characterized in** that the circuit is provided with a T-piece (17) constituting a part of the container (19,19a)
- 20 4. Refrigeration system according to any of claims 1-3 **characterized in** that the container (19a) is an integrated part of the condenser (14a).
- 25 5. Refrigeration system according to claim 4 **characterized in** that the container (19a) is the lower part of the condenser (14a).
- 30 6. Refrigeration system according to any of claims 1-5 **characterized in** that the circuit comprises at least one suction pipe (11) arranged between the evaporators (21,28) and the compressor (10) the suction pipe being arranged in heat exchange relationship with the container (19,19a).

7. Method for operating a refrigeration system which is provided with a closed circuit containing a refrigerant that in the vapor state is compressed to a high pressure gas, that the gas is allowed to gradually condense characterized in that a part of the condensate is temporarily collected as a non-circulating, hidden volume for later evaporation in a first evaporator and that at least a part of the remaining refrigerant is circulated through a second evaporator when the hidden volume has been filled.